

Table 5.4.7: The Co-efficient of a_i of the Redlich-Kister type polynomial equation (5.7) and the corresponding standard deviations $\sigma(Y^E)$ for the binary liquid mixtures of BC+Amines at 308.15 K.

Excess Property	A_0	A_1	A_2	A_3	A_4	σ
Butyl carbitol (BC) + N- Butyl amine (NBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0279	-42.9320	84.5371	-60.4061	18.8392	0.02947
$L_f^E \times 10^{12} \text{ (m)}$	-0.0068	-13.7730	25.6101	-16.8147	4.9870	0.0075
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0024	22.3528	-33.7492	14.7012	-3.3087	0.00413
$U^E \text{ (m s}^{-1}\text{)}$	0.03097	86.2830	-136.4081	62.3510	-12.2743	0.0445
Butyl carbitol (BC) + Sec-Butyl amine (SBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0571	-69.5970	142.8109	-109.4504	36.3128	0.0704
$L_f^E \times 10^{12} \text{ (m)}$	-0.0122	-20.4082	39.2437	-27.8041	8.9849	0.0193
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0005	23.1769	-34.6742	16.6983	-5.2008	0.0248
$U^E \text{ (m s}^{-1}\text{)}$	0.04918	137.3790	-231.8604	141.9557	-47.5401	0.3120
Butyl carbitol (BC) + Tert-Butyl amine (TBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.07542	-122.6108	258.3238	-201.6577	66.0599	0.1073
$L_f^E \times 10^{12} \text{ (m)}$	-0.0087	-31.6691	61.1457	-42.5269	13.0664	0.0209
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0100	21.1289	-26.5184	5.4635	-0.0652	0.0173
$U^E \text{ (m s}^{-1}\text{)}$	0.0106	182.0642	-277.2899	121.4711	-26.1673	0.2263
Butyl carbitol (BC) + N-Hexyl amine (NHA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0732	-17.5122	34.3989	-37.2248	20.2024	0.1146
$L_f^E \times 10^{12} \text{ (m)}$	0.0307	-5.9709	12.2515	-14.8753	8.5367	0.0495
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0717	10.2644	-23.4410	35.0115	-21.6932	0.1244
$U^E \text{ (m s}^{-1}\text{)}$	-0.7852	54.1629	-173.8472	338.4840	-217.2851	1.3070
Butyl carbitol (BC) + N-Octyl amine (NOA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0027	-4.0243	4.7007	-0.6188	-0.0595	0.0153
$L_f^E \times 10^{12} \text{ (m)}$	0.0001	-1.1681	1.2841	-0.0656	-0.0511	0.0062
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.007	-0.0775	0.6847	-1.3452	0.7349	0.0145
$U^E \text{ (m s}^{-1}\text{)}$	-0.03974	0.2488	-1.4763	5.5953	-4.3127	0.1533
Butyl carbitol (BC) + Cyclohexyl amine (CHA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0044	-1.5520	1.0986	1.8767	-1.4269	0.0059
$L_f^E \times 10^{12} \text{ (m)}$	0.0019	-0.6379	0.4152	0.8481	-0.6268	0.0025
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0029	4.1679	-4.5203	-1.2711	1.6243	0.0069
$U^E \text{ (m s}^{-1}\text{)}$	-0.0639	-20.2399	43.6159	-42.2443	18.9349	0.0656

Table 5.3.7: The Co-efficient of a_i of the Redlich-Kister type polynomial equation (5.7) and the corresponding standard deviations $\sigma(Y^E)$ for the binary liquid mixtures of EC+Amines at 308.15 K.

Excess Property	A_0	A_1	A_2	A_3	A_4	σ
Ethyl carbitol (EC) + N- Butyl amine (NBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0200	-35.0128	59.4828	-32.7713	8.3213	0.0313
$L_f^E \times 10^{12} \text{ (m)}$	-0.0056	-10.4969	16.3913	-7.4699	1.5800	0.0113
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0054	10.9243	-11.6015	-0.6028	1.2788	0.0195
$U^E \text{ (m s}^{-1}\text{)}$	0.0747	49.7653	-47.9539	-17.0857	15.2477	0.2499
Ethyl carbitol (EC) + Sec-Butyl amine (SBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0101	-54.2140	93.4227	-52.3536	13.1528	0.0215
$L_f^E \times 10^{12} \text{ (m)}$	-0.0006	-14.6635	22.6929	-9.8925	1.8611	0.0086
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0037	8.4742	-6.3897	-4.7103	2.6373	0.0183
$U^E \text{ (m s}^{-1}\text{)}$	-0.0206	61.9162	-44.6980	-51.2556	34.1209	0.2116
Ethyl carbitol (EC) + Tert-Butyl amine (TBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0425	-99.3634	187.6197	-125.3552	37.1696	0.0552
$L_f^E \times 10^{12} \text{ (m)}$	-0.0062	-23.8611	40.5849	-22.7746	6.0624	0.0104
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0014	5.1543	-2.7212	-4.5062	2.0659	0.0154
$U^E \text{ (m s}^{-1}\text{)}$	0.0168	93.1672	-115.2062	19.6545	2.3111	0.1522
Ethyl carbitol (EC) + N-Hexyl amine (NHA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0035	-9.7904	12.2736	-2.4886	0.0025	0.0136
$L_f^E \times 10^{12} \text{ (m)}$	0.0013	-2.6171	2.9943	-0.2223	-0.1559	0.0055
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0019	-1.5197	2.3315	-1.4953	0.6855	0.0117
$U^E \text{ (m s}^{-1}\text{)}$	-0.0296	0.5216	5.0859	-11.311	5.7076	0.1510
Ethyl carbitol (EC) + N-Octyl amine (NOA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0005	-1.1942	1.3739	-0.4860	0.3037	0.0024
$L_f^E \times 10^{12} \text{ (m)}$	0.0002	0.1760	-0.0636	-0.2467	0.1330	0.0011
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0014	-6.8094	4.9409	2.2465	-0.3715	0.0059
$U^E \text{ (m s}^{-1}\text{)}$	0.0004	-10.8131	8.9945	1.3532	0.4651	0.0017
Ethyl carbitol (EC) + Cyclohexyl amine (CHA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0008	-2.6348	3.7155	-1.6359	0.5532	0.0020
$L_f^E \times 10^{12} \text{ (m)}$	0.0003	-1.0230	1.4233	-0.6266	0.2254	0.0009
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0023	3.2695	-4.3945	2.1073	-0.9766	0.0053
$U^E \text{ (m s}^{-1}\text{)}$	0.0008	-0.9115	1.0688	-0.1763	0.0188	0.0001

Table 5.3.7: The Co-efficient of a_i of the Redlich-Kister type polynomial equation (5.7) and the corresponding standard deviations $\sigma(Y^E)$ for the binary liquid mixtures of EC+Amines at 308.15 K.

Excess Property	A_0	A_1	A_2	A_3	A_4	σ
Ethyl carbitol (EC) + N- Butyl amine (NBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0200	-35.0128	59.4828	-32.7713	8.3213	0.0313
$L_f^E \times 10^{12} \text{ (m)}$	-0.0056	-10.4969	16.3913	-7.4699	1.5800	0.0113
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0054	10.9243	-11.6015	-0.6028	1.2788	0.0195
$U^E \text{ (m s}^{-1}\text{)}$	0.0747	49.7653	-47.9539	-17.0857	15.2477	0.2499
Ethyl carbitol (EC) + Sec-Butyl amine (SBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0101	-54.2140	93.4227	-52.3536	13.1528	0.0215
$L_f^E \times 10^{12} \text{ (m)}$	-0.0006	-14.6635	22.6929	-9.8925	1.8611	0.0086
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0037	8.4742	-6.3897	-4.7103	2.6373	0.0183
$U^E \text{ (m s}^{-1}\text{)}$	-0.0206	61.9162	-44.6980	-51.2556	34.1209	0.2116
Ethyl carbitol (EC) + Tert-Butyl amine (TBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0425	-99.3634	187.6197	-125.3552	37.1696	0.0552
$L_f^E \times 10^{12} \text{ (m)}$	-0.0062	-23.8611	40.5849	-22.7746	6.0624	0.0104
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0014	5.1543	-2.7212	-4.5062	2.0659	0.0154
$U^E \text{ (m s}^{-1}\text{)}$	0.0168	93.1672	-115.2062	19.6545	2.3111	0.1522
Ethyl carbitol (EC) + N-Hexyl amine (NHA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0035	-9.7904	12.2736	-2.4886	0.0025	0.0136
$L_f^E \times 10^{12} \text{ (m)}$	0.0013	-2.6171	2.9943	-0.2223	-0.1559	0.0055
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0019	-1.5197	2.3315	-1.4953	0.6855	0.0117
$U^E \text{ (m s}^{-1}\text{)}$	-0.0296	0.5216	5.0859	-11.311	5.7076	0.1510
Ethyl carbitol (EC) + N-Octyl amine (NOA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0005	-1.1942	1.3739	-0.4860	0.3037	0.0024
$L_f^E \times 10^{12} \text{ (m)}$	0.0002	0.1760	-0.0636	-0.2467	0.1330	0.0011
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0014	-6.8094	4.9409	2.2465	-0.3715	0.0059
$U^E \text{ (m s}^{-1}\text{)}$	0.0004	-10.8131	8.9945	1.3532	0.4651	0.0017
Ethyl carbitol (EC) + Cyclohexyl amine (CHA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0008	-2.6348	3.7155	-1.6359	0.5532	0.0020
$L_f^E \times 10^{12} \text{ (m)}$	0.0003	-1.0230	1.4233	-0.6266	0.2254	0.0009
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0023	3.2695	-4.3945	2.1073	-0.9766	0.0053
$U^E \text{ (m s}^{-1}\text{)}$	0.0008	-0.9115	1.0688	-0.1763	0.0188	0.0001

Table 5.2.7: The Co-efficient of a_i of the Redlich-Kister type polynomial equation (5.7) and the corresponding standard deviations $\sigma(Y^E)$ for the binary liquid mixtures of MC+Amines at 308.15 K.

Excess Property	A_0	A_1	A_2	A_3	A_4	σ
Methyl carbitol (MC) + N- Butyl amine (NBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0224	-42.8585	76.9814	-47.6183	13.5260	0.0268
$L_f^E \times 10^{12} \text{ (m)}$	-0.0057	-12.8386	21.2897	-11.3919	2.9483	0.0081
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0053	12.0546	-13.4148	0.5319	0.8221	0.0134
$U^E \text{ (m s}^{-1}\text{)}$	0.0580	65.0406	-83.8419	19.1073	-0.3686	0.1536
Methyl carbitol (MC) + Sec-Butyl amine (SBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0142	-49.6861	82.0598	-43.1675	10.8185	0.0236
$L_f^E \times 10^{12} \text{ (m)}$	-0.0033	-12.6112	18.7168	-7.6332	1.5339	0.0074
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0042	-0.0239	2.3629	-3.7779	1.4292	0.0149
$U^E \text{ (m s}^{-1}\text{)}$	0.0551	34.6735	-25.9919	-23.5631	14.7629	0.1639
Methyl carbitol (MC) + Tert-Butyl amine (TBA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	-0.0435	-87.7523	154.9606	-93.2516	26.1127	0.0591
$L_f^E \times 10^{12} \text{ (m)}$	-0.0098	-19.6640	31.0627	-15.1451	3.7619	0.0141
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	0.0118	-5.6378	8.0662	-3.9390	1.4899	0.0202
$U^E \text{ (m s}^{-1}\text{)}$	0.1187	38.4937	-46.5648	8.08678	-0.1966	0.1987
Methyl carbitol (MC) + N-Hexyl amine (NHA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0118	-7.7885	9.2943	-1.3955	-0.1207	0.0377
$L_f^E \times 10^{12} \text{ (m)}$	0.0045	-1.5294	1.7564	-0.1101	-0.1204	0.0152
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0075	-7.9271	6.8699	0.2649	0.7945	0.0314
$U^E \text{ (m s}^{-1}\text{)}$	-0.1086	-12.2989	9.5110	-0.1784	3.0439	0.3739
Methyl carbitol (MC) + N-Octyl amine (NOA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0073	1.1504	-1.3569	0.1918	0.0041	0.0191
$L_f^E \times 10^{12} \text{ (m)}$	0.0029	1.3715	-1.2081	-0.1281	-0.0395	0.0076
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0058	-13.2292	9.1889	2.1044	1.9447	0.0155
$U^E \text{ (m s}^{-1}\text{)}$	-0.622	-27.2410	22.3957	-0.1552	5.0804	0.1795
Methyl carbitol (MC) + Cyclohexyl amine (CHA)						
$K_S^E \times 10^{11} \text{ (m}^2 \text{ N}^{-1}\text{)}$	0.0051	-2.3420	2.0425	0.9791	-0.6863	0.0208
$L_f^E \times 10^{12} \text{ (m)}$	0.0022	-0.7412	0.5232	0.5286	-0.3136	0.0093
$Z^E \times 10^{-4} \text{ (Kg m}^{-2} \text{ s}^{-1}\text{)}$	-0.0056	0.0644	0.6595	-1.2869	0.5710	0.0249
$U^E \text{ (m s}^{-1}\text{)}$	-0.0549	-1.5353	12.7664	-22.6346	11.4654	0.2635

Table: 4.4.7: The Co efficient of a_i of the Redlich-Kister type polynomial equation (4.7) and the corresponding standard deviations σ (Y^E) for the binary mixtures of Butyl carbitol (BC) + various amines at 308.15 K.

Excess Property	A_0	A_1	A_2	A_3	A_4	σ
Butyl carbitol (BC) + N- Butyl amine (NBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.00038	2.13936	-3.45663	1.77913	-0.4621	0.00054
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.00168	-0.11544	0.43405	-0.83539	0.51449	0.00211
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.00368	6082.45	-39420.93	185595.34	-634873.79	0.27222
Butyl carbitol (BC) + Sec-Butyl amine (SBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.00039	2.0467	-3.25294	1.62655	-0.42085	0.00046
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.00246	-0.26125	0.99776	-1.99642	1.25542	0.00558
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.00414	6395.48	-42763.92	206780.59	-717715.08	0.30901
Butyl carbitol (BC) + Tert-Butyl amine (TBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.00019	1.84459	-2.8349	1.30484	-0.31478	0.00021
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.00053	-0.01388	0.12164	-0.22765	0.12096	0.00172
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.0025	5866.37	-37410.27	173438.22	-584378.18	0.22165
Butyl carbitol (BC) + N-Hexyl amine (NHA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	-0.000025	0.81246	-1.0339	0.26479	-0.04338	0.000082
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.00225	-0.18836	0.79397	-1.53883	0.92809	0.00544
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.00017	2694.098	-11858.09	39812.63	-110679.94	0.08982
Butyl carbitol (BC) + N-Octyl amine (NOA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.000038	0.07419	-0.07662	0.00399	-0.0015	0.000094
$V^E \times 10^6$ (m ³ mol ⁻¹)	-0.00348	0.32717	-1.39639	2.69207	-1.61225	0.01039
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.0000009	935.1578	-2709.08	6598.76	-18191.67	0.01579
Butyl carbitol (BC) + Cyclohexyl amine (CHA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.000059	1.03905	-1.50728	0.60891	-0.14078	0.00013
$V^E \times 10^6$ (m ³ mol ⁻¹)	-0.0026	0.20608	-0.83939	1.70709	-1.06873	0.00555
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.00021	940.313	-2519.27	4477.44	-7976.19	0.02398

Table:4.3.7: The Co-efficients of a_i of the Redlich-Kister type polynomial equation (4.7) and the corresponding standard deviations σ (Y^E) for the binary mixtures of EC+ Amines at 308.15 K.

Excess Property	A_0	A_1	A_2	A_3	A_4	σ
Ethyl carbitol (EC) + N-Butyl amine (NBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	-0.000003	0.84919	-1.14906	0.396	-0.07912	0.000081
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.000128	-0.02629	0.12509	-0.18198	0.08289	0.00102
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.000396	3420.15	-16501.05	58603.96	-163056.24	0.06221
Ethyl carbitol (EC) + Sec-Butyl amine (SBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	-0.000031	0.78516	-1.03012	0.29636	-0.05137	0.000072
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.00265	-0.15088	0.64015	-1.29377	0.8008	0.00473
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.000325	3610.21	-18079.16	67568.11	-197217.59	0.04933
Ethyl carbitol (EC) + Tert-Butyl amine (TBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.000013	0.66051	-0.84009	0.21411	-0.03457	0.000055
$V^E \times 10^6$ (m ³ mol ⁻¹)	-0.00018	0.06861	-0.3495	0.77352	-0.49177	0.00523
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.000575	3282.46	-15628.15	55245.95	-154416.48	0.09331
Ethyl carbitol (EC) + N-Hexyl amine (NHA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.000128	0.04281	-0.01999	-0.06714	0.04398	0.0003
$V^E \times 10^6$ (m ³ mol ⁻¹)	-0.0003	0.03571	-0.36598	0.59081	-0.26332	0.01102
$G^{*E} \times 10^3$ (N mol ⁻¹)	-0.00026	1327.03	-4228.616	9850.385	-21283.48	0.10573
Ethyl carbitol (EC) + N-Octyl amine (NOA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.000017	-0.33152	0.27572	0.0407	0.01502	0.00005
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.00148	-0.1421	0.63246	-1.26974	0.77264	0.00625
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.00313	-2020.23	68586.61	-627269.89	3.00862	3.49043
Ethyl carbitol (EC) + Cyclohexyl amine (CHA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	-0.000015	0.26306	-0.30807	0.05024	-0.00521	0.000053
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.00233	-0.17521	0.74304	-1.48465	0.91107	0.00579
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.0000319	344.7376	-627.5836	358.15361	555.1295	0.00897

Table 4.2.7: The Co-efficients of a_i of the Redlich-Kister type polynomial equation (4.7) and the corresponding standard deviations σ (Y^E) for the binary mixtures of MC+ Amines at 308.15 K.

Excess Property	A_0	A_1	A_2	A_3	A_4	σ
Methyl carbitol (MC) + N- Butyl amine (NBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	-0.00102	0.64896	-0.57047	-0.36031	0.28281	0.0013
$V^E \times 10^6$ (m ³ mol ⁻¹)	-0.00294	-6.91548	11.83324	-6.55798	1.64487	0.00392
$G^{*E} \times 10^3$ (N mol ⁻¹)	-0.000301	2618.1684	-8634.34	11927.24621	9798.74683	0.04256
Methyl carbitol (MC) + Sec-Butyl amine (SBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	-0.000018	0.33725	-0.39904	0.08154	-0.01971	0.000054
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.000707	-0.06148	0.26214	-0.4612	0.25915	0.00149
$G^{*E} \times 10^3$ (N mol ⁻¹)	-0.000047	2643.17802	-11215.3680	34833.76	-87963.08	0.01211
Methyl carbitol (MC) + Tert-Butyl amine (TBA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.000007	0.2349	-0.27198	0.04537	-0.01186	0.00009
$V^E \times 10^6$ (m ³ mol ⁻¹)	-0.00237	0.16859	-0.64978	1.23175	-0.74501	0.00524
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.0001374	2392.2543	-9786.2227	29700.09452	-75174.1899	0.03817
Methyl carbitol (MC) + N-Hexyl amine (NHA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.000013	-0.22028	0.19661	0.02041	0.00327	0.00007
$V^E \times 10^6$ (m ³ mol ⁻¹)	-0.00092	0.05871	-0.24412	0.43913	-0.25149	0.00194
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.0000084	883.7606	-2372.5638	4449.2148	-8737.6206	0.01945
Methyl carbitol (MC) + N-Octyl amine (NOA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	-0.0000006	-0.46795	0.34018	0.07184	0.056	0.00008
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.00155	-0.10482	0.5089	-0.84415	0.43604	0.00637
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.000016	173.0691	-259.4579	121.2605	-317.9294	0.04846
Methyl carbitol (MC)+ Cyclohexyl amine (CHA)						
$\eta^E \times 10^3$ (Kg m ⁻¹ s ⁻¹)	0.000028	0.0303	-0.02738	-0.00902	0.00605	0.000057
$V^E \times 10^6$ (m ³ mol ⁻¹)	0.0007048	-0.07531	0.32318	-0.64254	0.39215	0.00269
$G^{*E} \times 10^3$ (N mol ⁻¹)	0.0000254	179.99809	-296.72935	176.42425	179.6763	0.01094